PROBed

User’s manual

Table of contents

Manufacturer....3
Product description....4
Accessories....5
Marking Label....6
Installation....7
How to assemble/remove head and foot boards....8
How to assemble /separate PROBed....9
How to assemble /separate PROBed HMC....10
How to assemble head and foot boards....11
Headrest....12
Accessories....13
How to assemble the raising aid....14
Adjustment of Leg/Headrest....15
Adjustment of Back/Leg rest....16
Extension....17
How to operate the integrated wooden frame....18
Brakes....19
Maintenance schedule....20
Technical information....21
Control unit....22
Fault finding table....23
Fault finding table continued....24
Spare part list....25
Environmental product declaration....26
Environmental product declaration....27
Risk analysis....28-32

Manufacturer

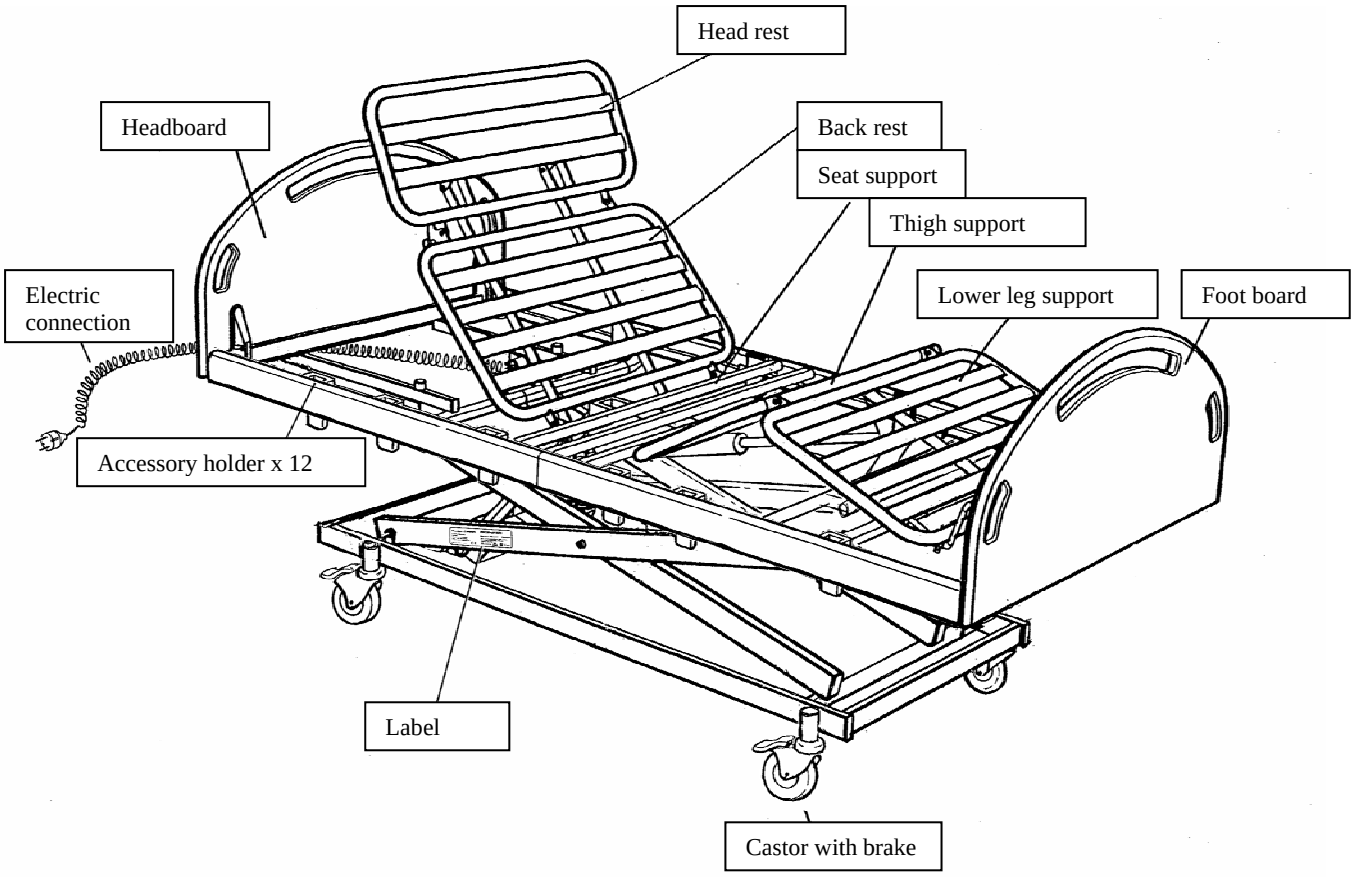
Proton Caretec AB

Armaturgatan
SE-331 21 VÄRNAMO

Phone	Switchboard	0370-69 26 60
	Customer Service	0370-69 26 61
	Spar parts	0370-69 26 77
Fax		0370-69 26 70
E-post		caretec@proton.se
www		www.protoncaretec.se

Certified in accordance with ISO9001:2000 and 14001:1996

Product description



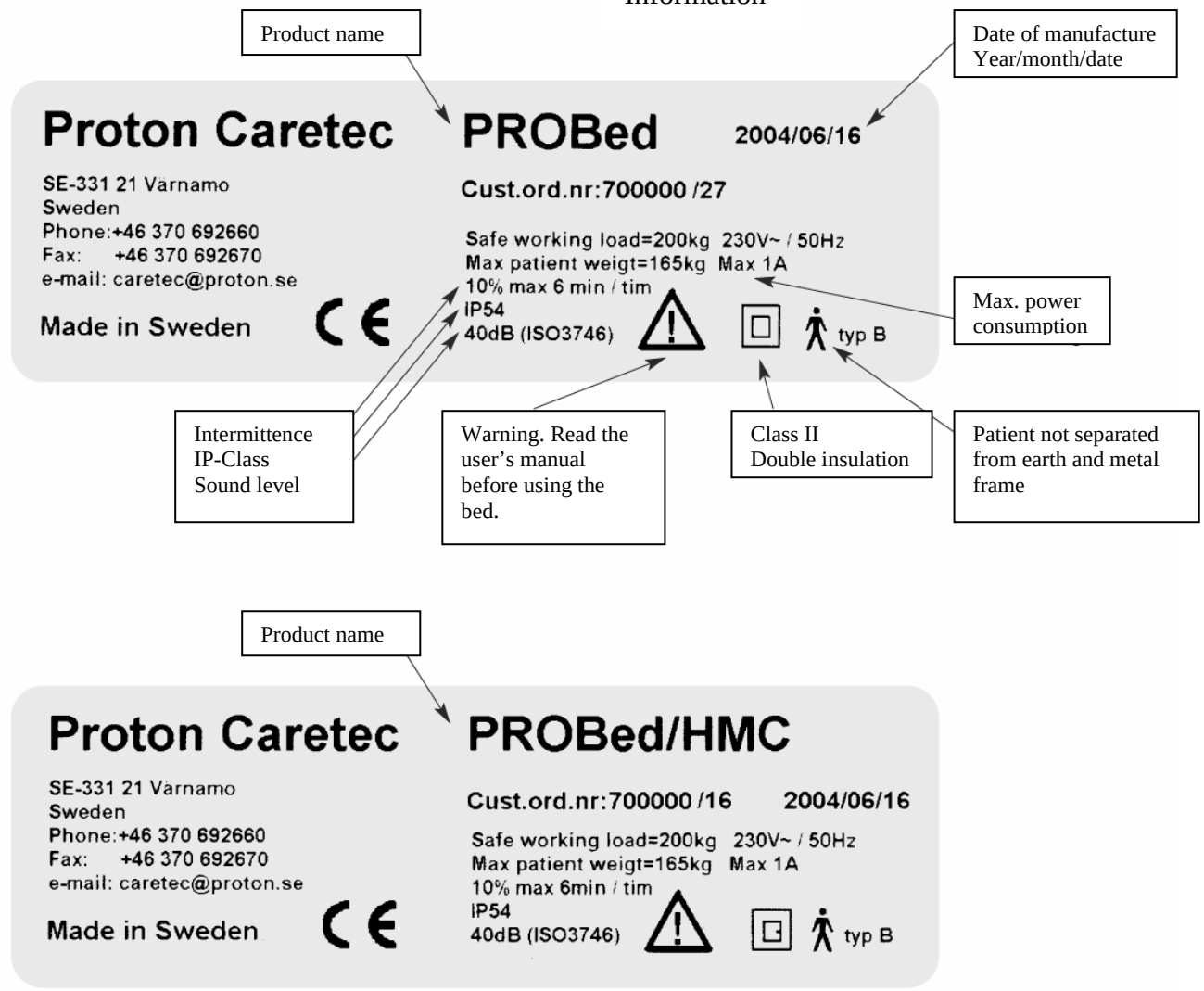
Accessories

for PROBed Nursing Homes and HMC

Accessories	Part No.
Decorative edging for the top bed, birch patterned AL-profile	**19200**
Decorative edging for the bottom bed made of solid birch wood	**19201**
Additional lifting device for user's weight 200 kg (SWL 235 kg)	**19202**
Raising aid / side support, length 55 cm	**19203**
Side support, length 55 cm	**19204**
Heightened support handle length 37 cm/ height 48 cm	**19205**
Turnable raising aid, right, length 36 / height 24 cm, intermediate depth 53 cm	**19206**
Turnable raising aid, left, length 36 / height 24 cm, intermediate depth 53 cm	**19207**
Foldable raising aid, "Maxi support" left	**19208**
Foldable raising aid, "Maxi support" right	**19212**
Lifting pole with trapeze handle	**19209**
Fold-down bedrail with mid-position, right, length 180 cm, grey Epoxy	**19210**
Fold-down bedrail with mid-position, left, length 180 cm, grey Epoxy	**19211**

Marking Label

Information



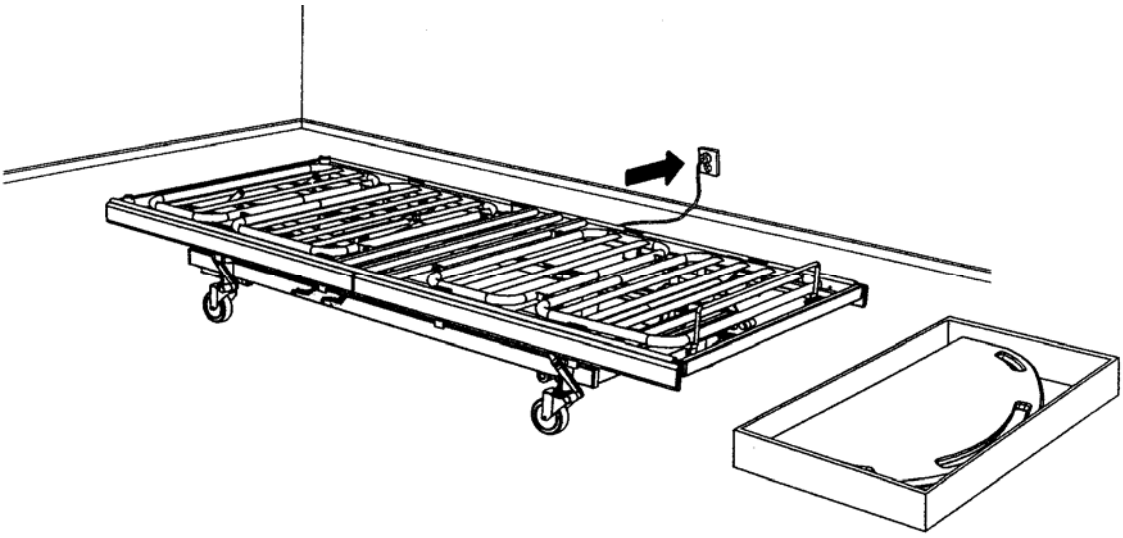
Installation

Socket outlets must not be blocked

If separation into two sections or assembly of the bed is required, please read:

"How to assemble/separate the bed".

1



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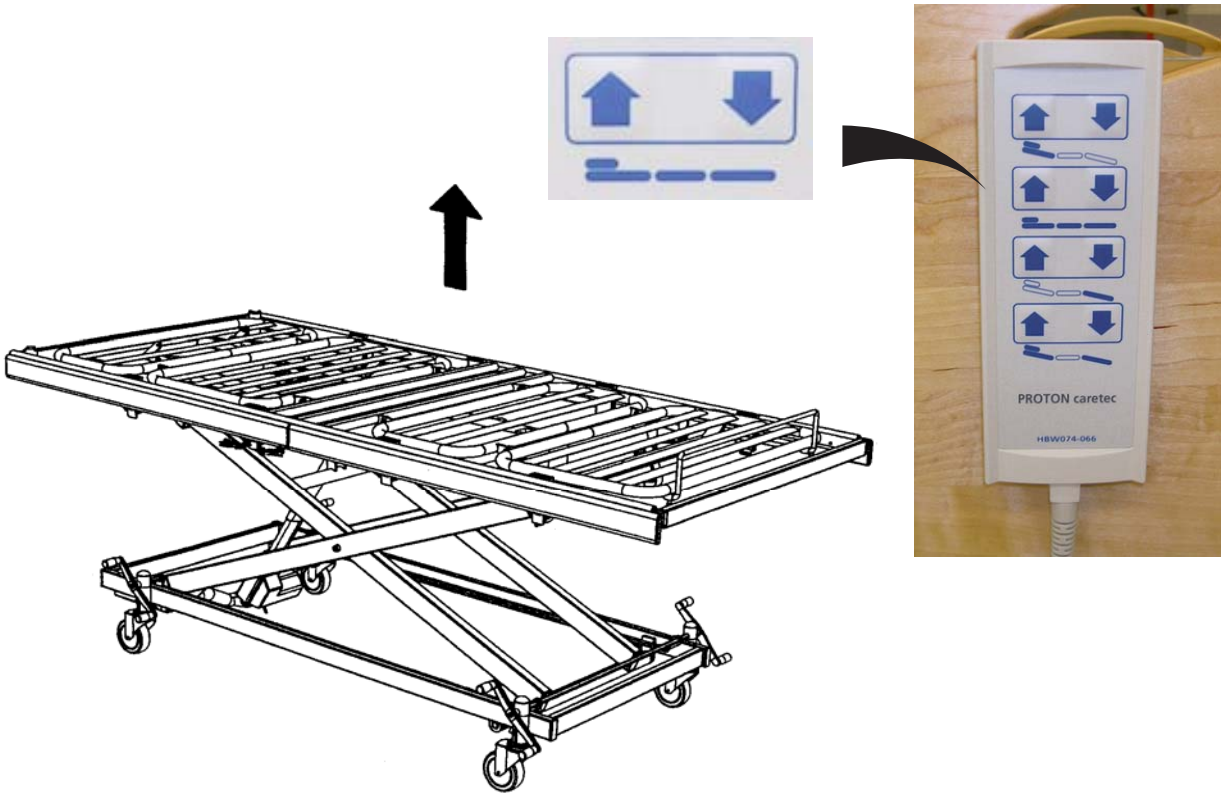
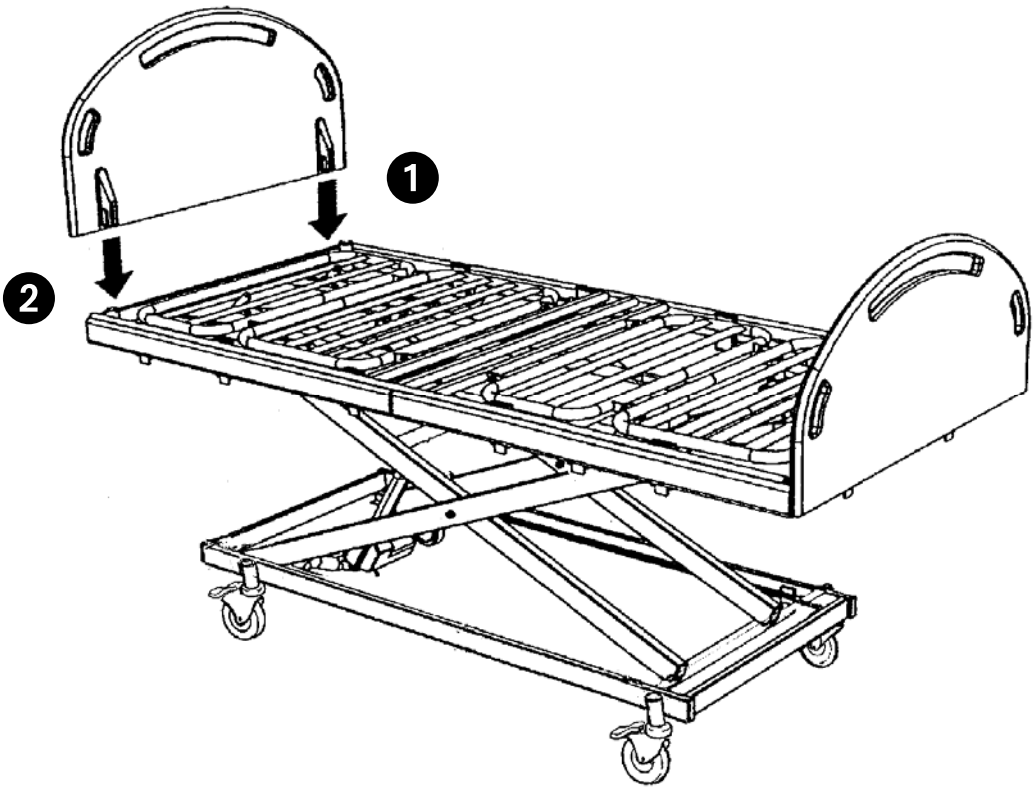
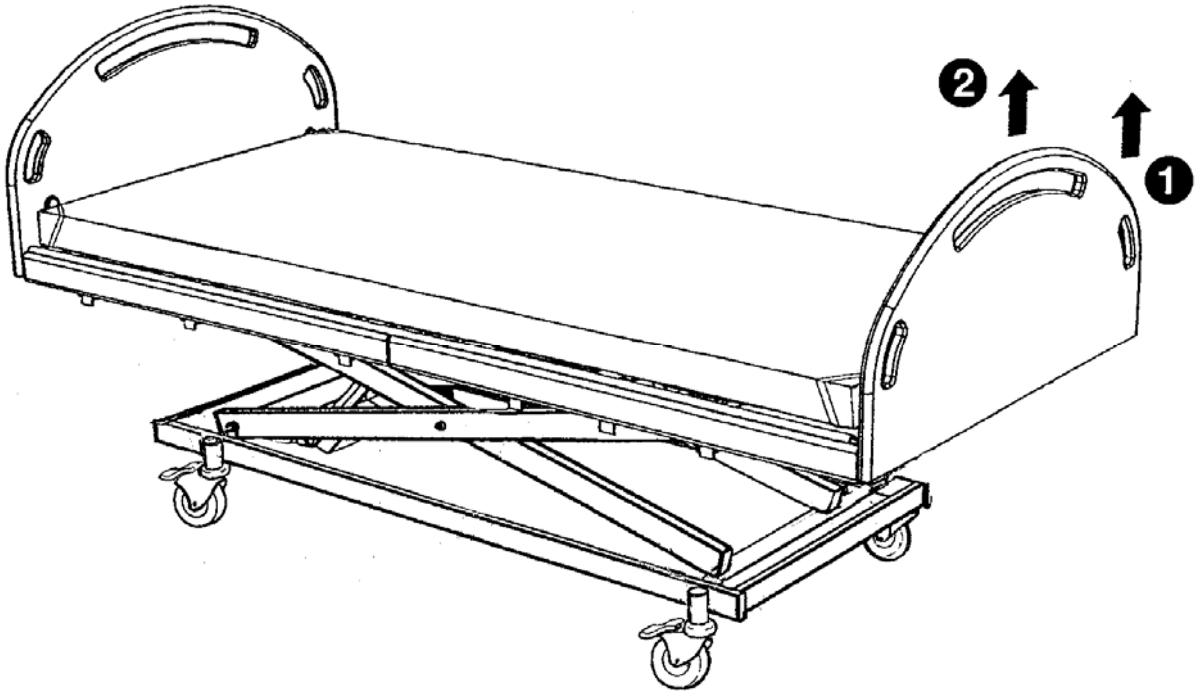


How to assemble / remove the boards

Assemble

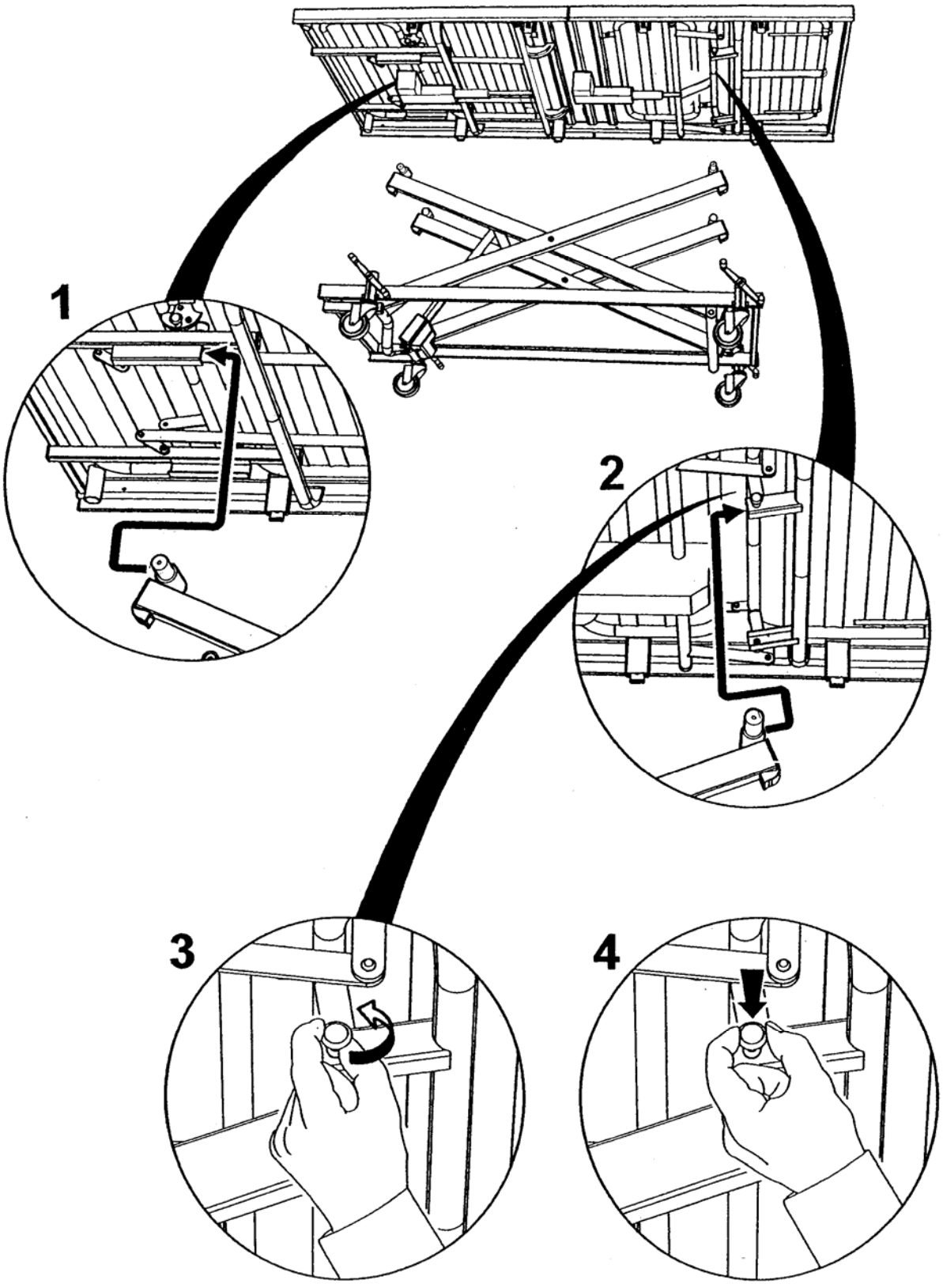


Remove



How to assemble/ separate PROBed

Nursing Home/HMC - Bed base –frame



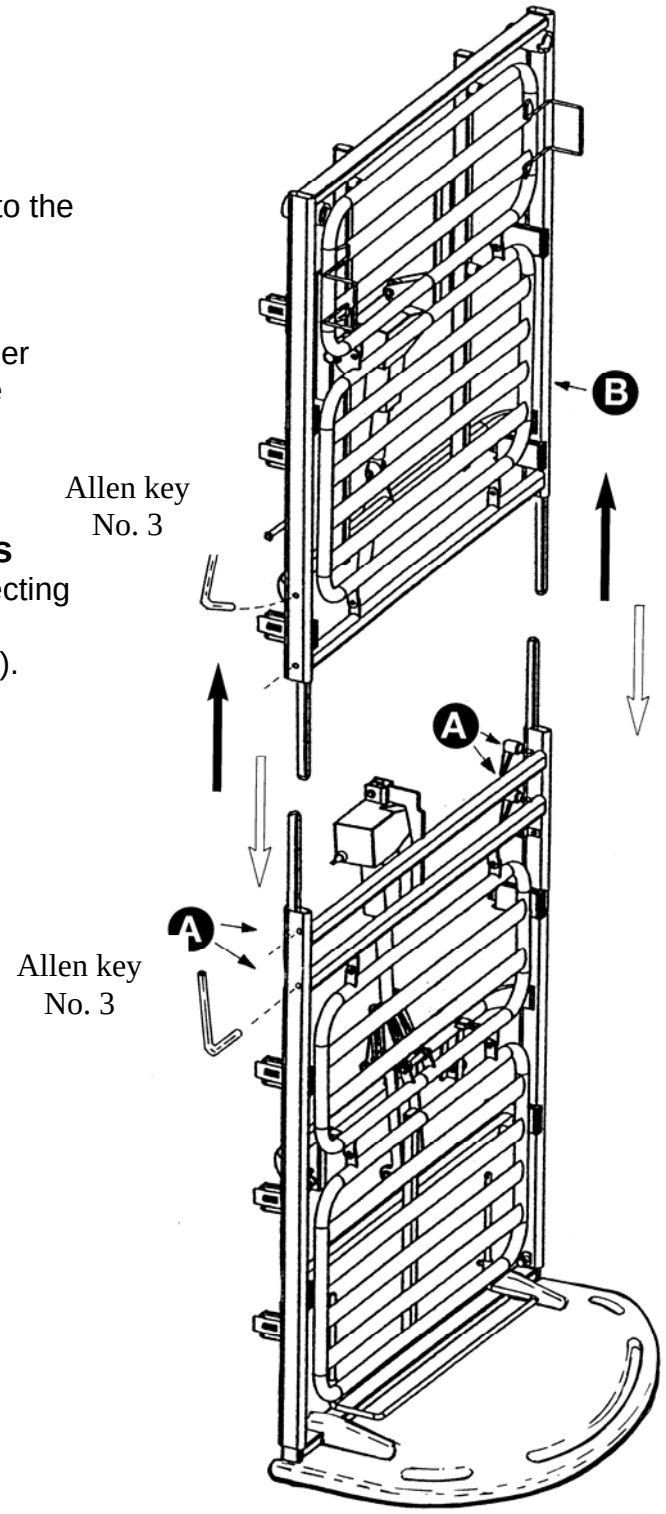
How to assemble /separate PROBed HMC

How to assemble the bed

1. Press the bed base head section (B) to the leg section.
2. Tighten the 8 locking screws.
3. Connect the 2 motor cables to the transformer, connecting the transformer and the actuators to the two bed base sections

How to separate the bed sections

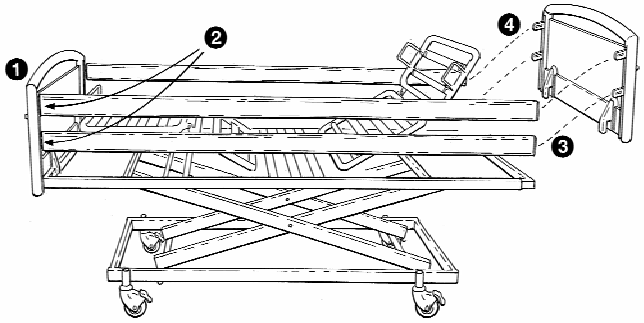
1. Disconnect the 2 motor cables, connecting
2. Undo the 8 locking screws (A).
3. Pull out the bed base head section (B).



How to assemble the boards

With integrated side guards

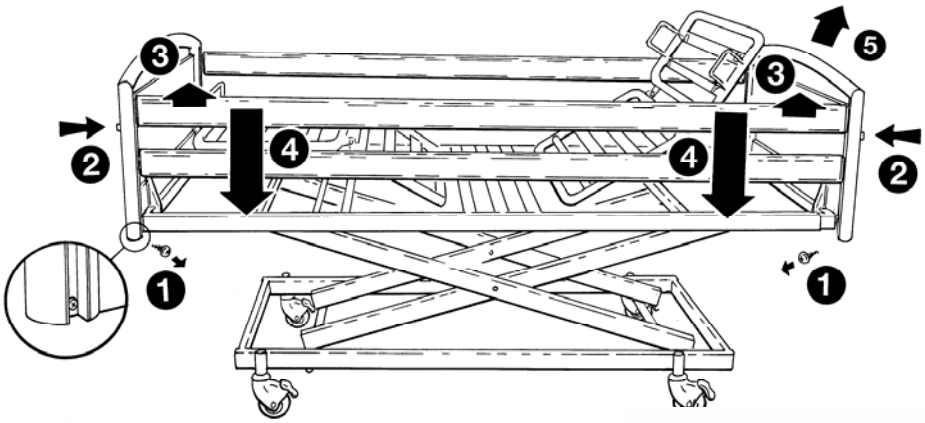
Installation of the wooden frame with integrated side guards

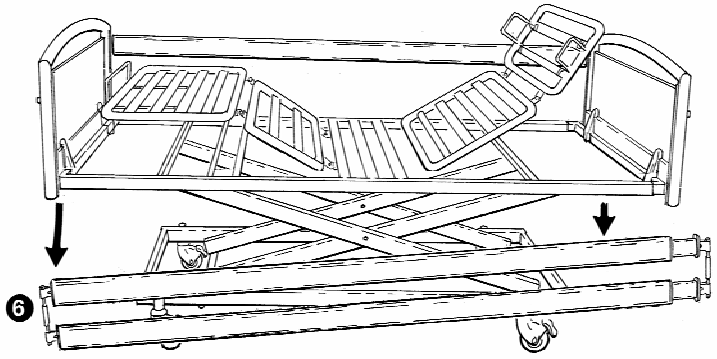


1. Put one of the boards on the bed frame and press down to fix it.
2. Thread the aluminium long sides on the plastic lugs which are fixed to the board.
3. Then thread the other board on the plastic lugs fixed to the aluminium long sides.
4. Put the other board on the bed frame and press down to fix it.

How to remove the wooden frame with integrated side guards

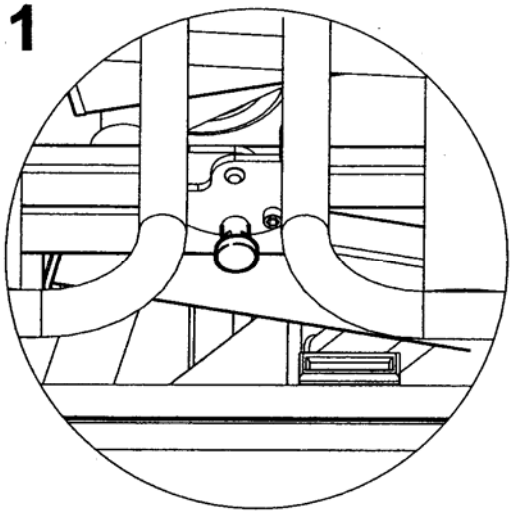
1. Undo the screws.
2. Press the button.
3. 4. Slightly lift the side guard and let down both the side guards, kept together.
5. Remove the board by pulling it upwards (first lift at one side)
6. Keep the long sides in pairs (do not separate them)

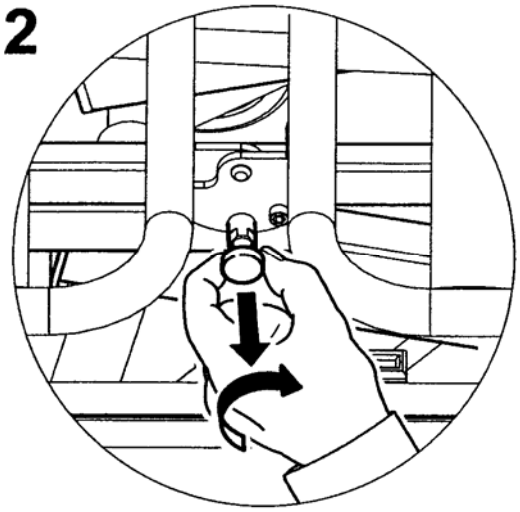


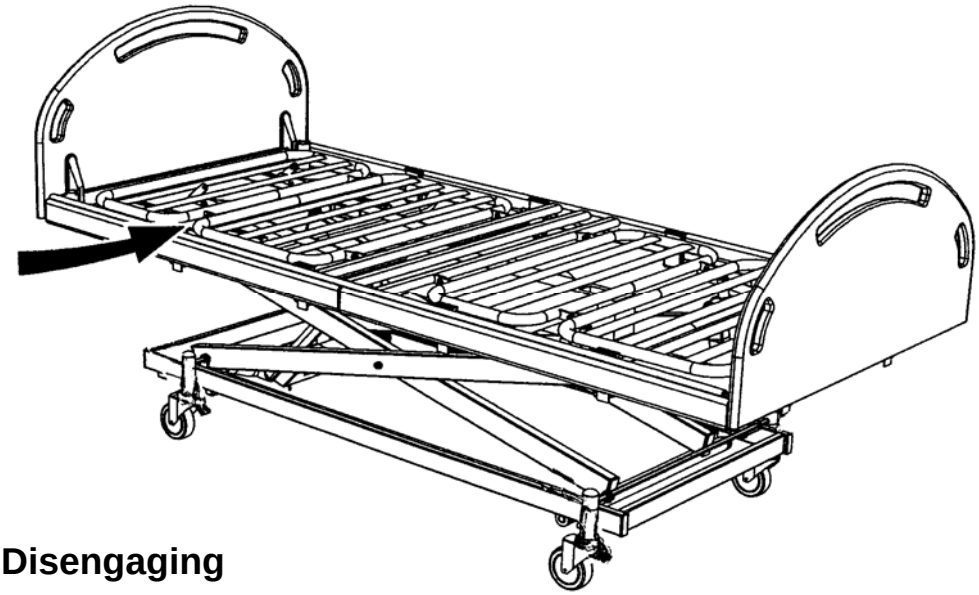


Headrest function

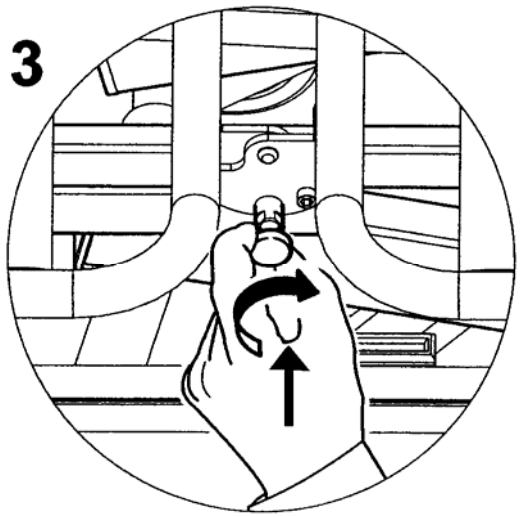
Engaging

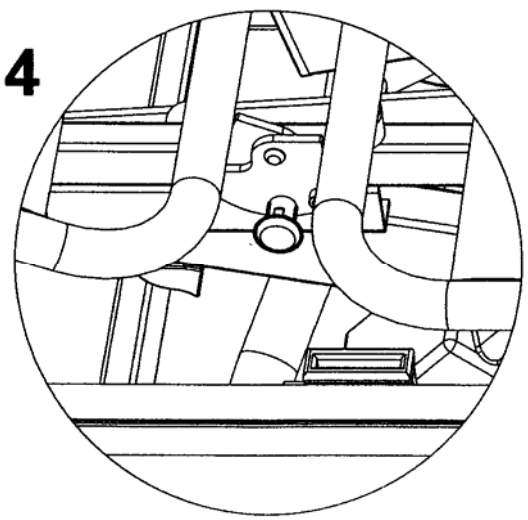






Disengaging

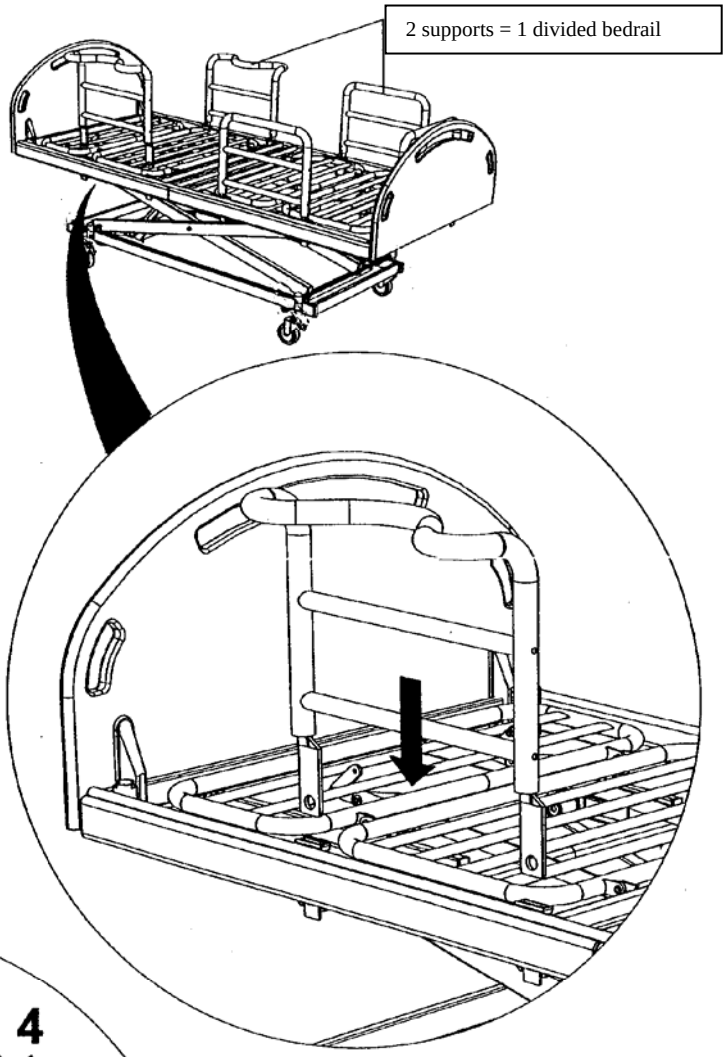


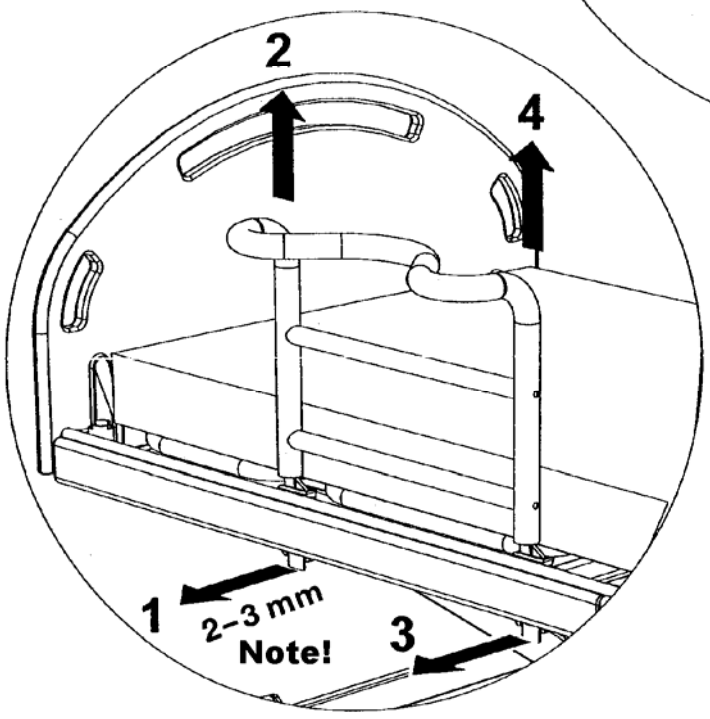


Accessories

How to assembly / Remove:

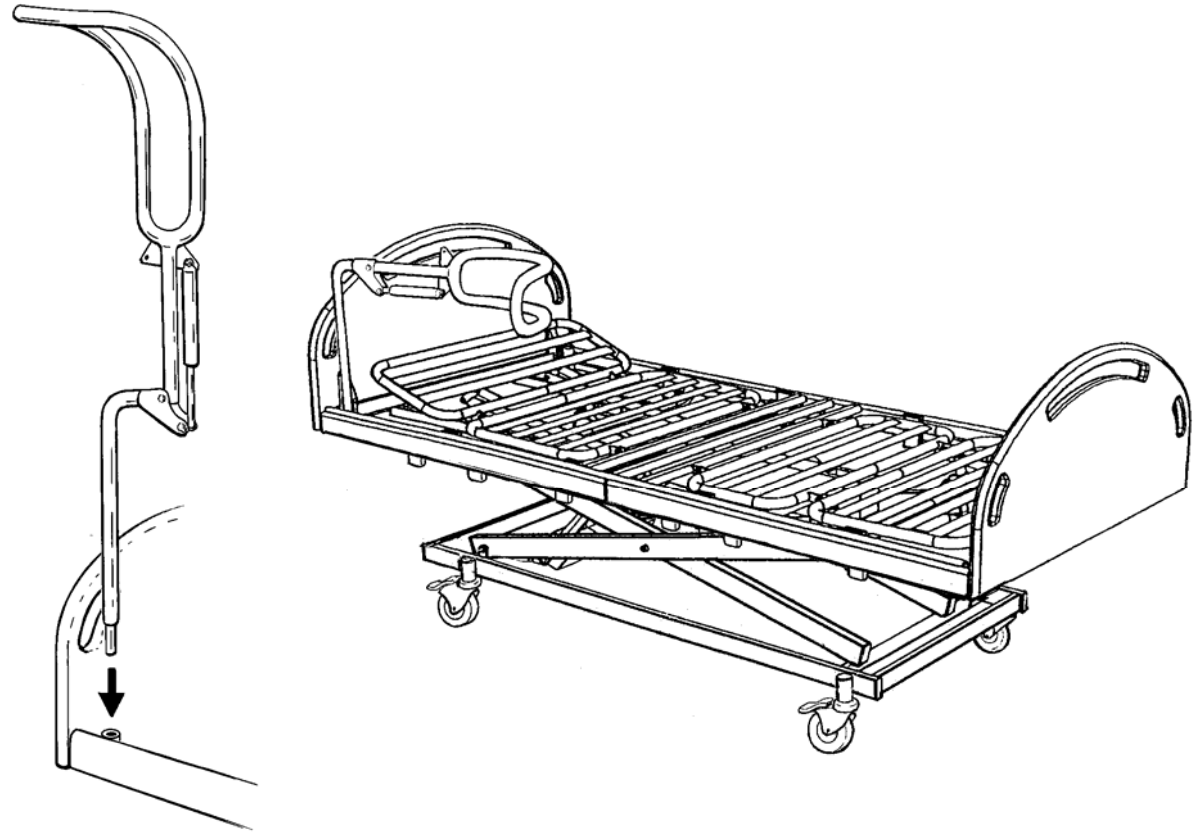
- Side support
- Bedrail
- Raising aid





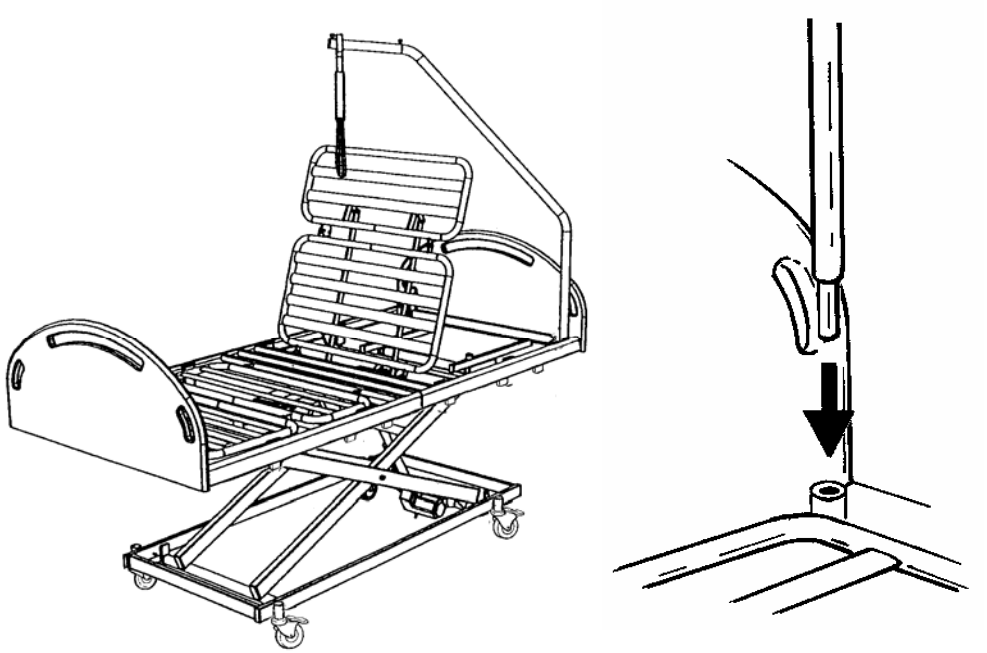
How to assemble the Raising aid

MAXI-support and Lifting pole

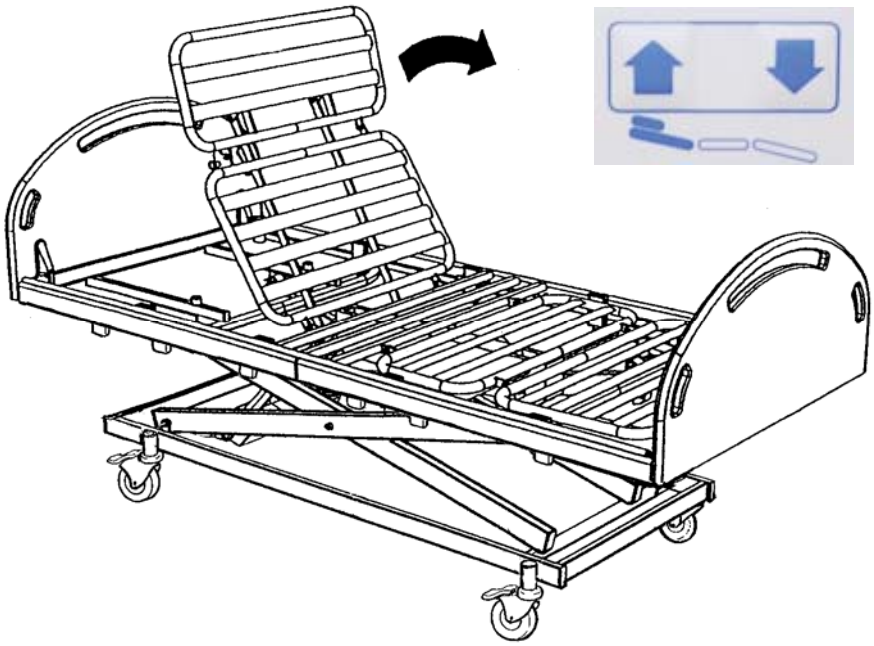


Lifting pole

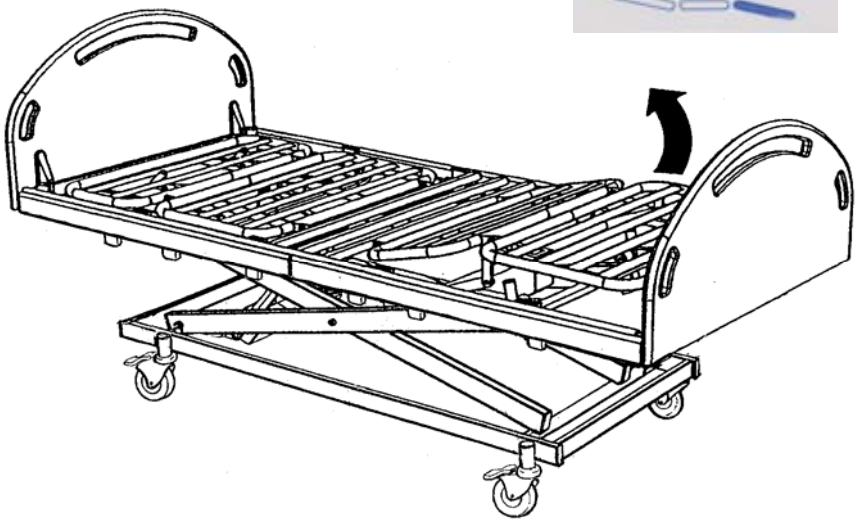
Mount the lifting pole to have an overbed position, as illustrated.

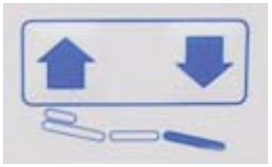


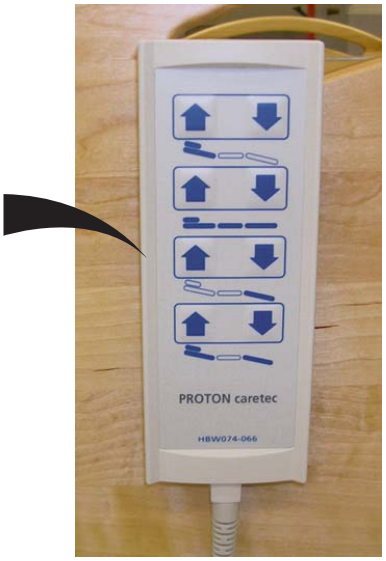
Back/Headrest



Leg rest

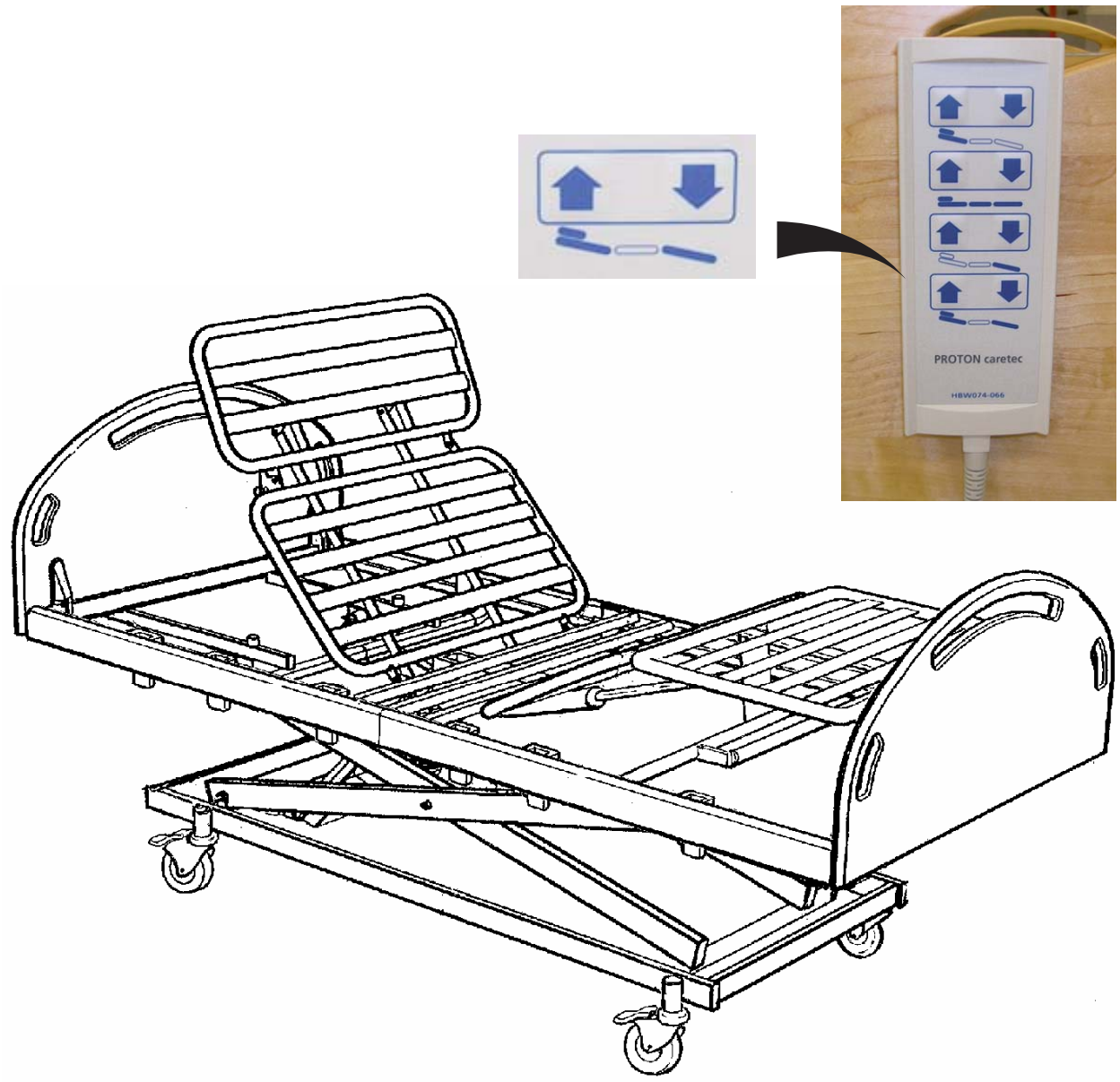




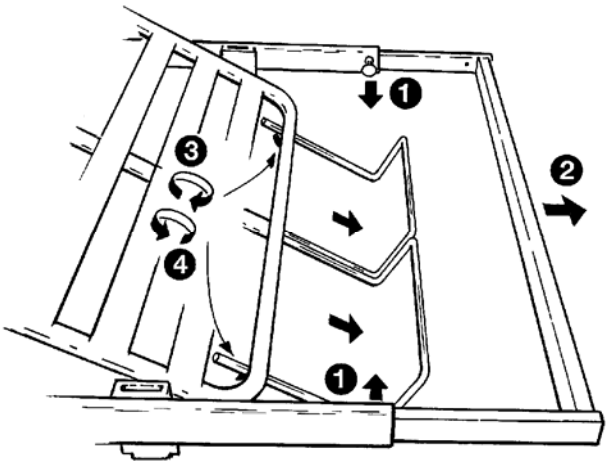


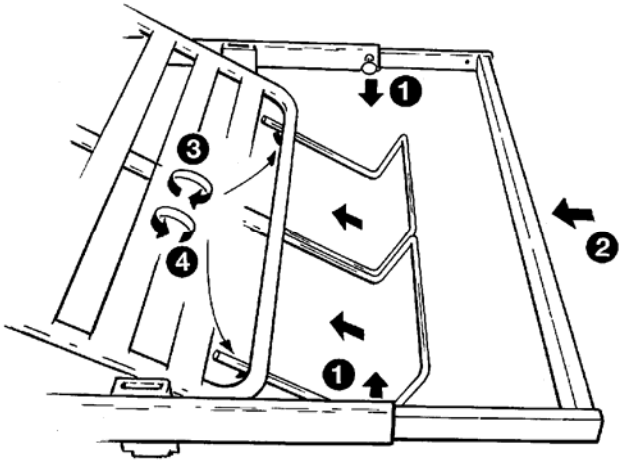
Adjustment of back- and leg rest

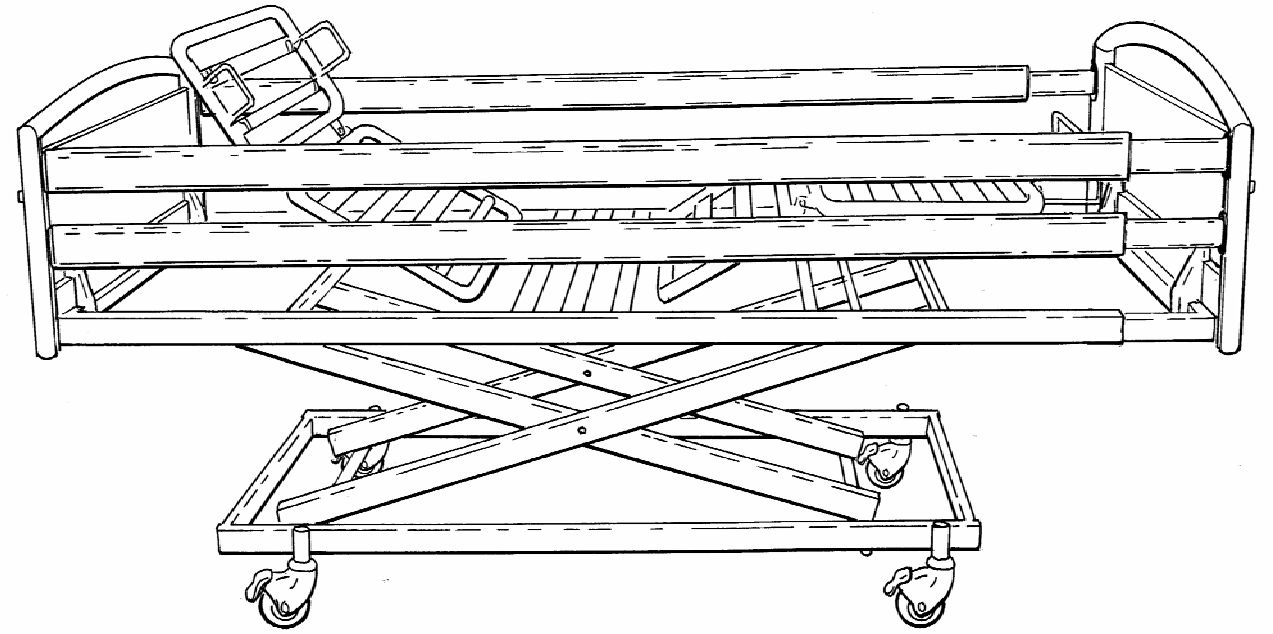
Comfort position



Extension part



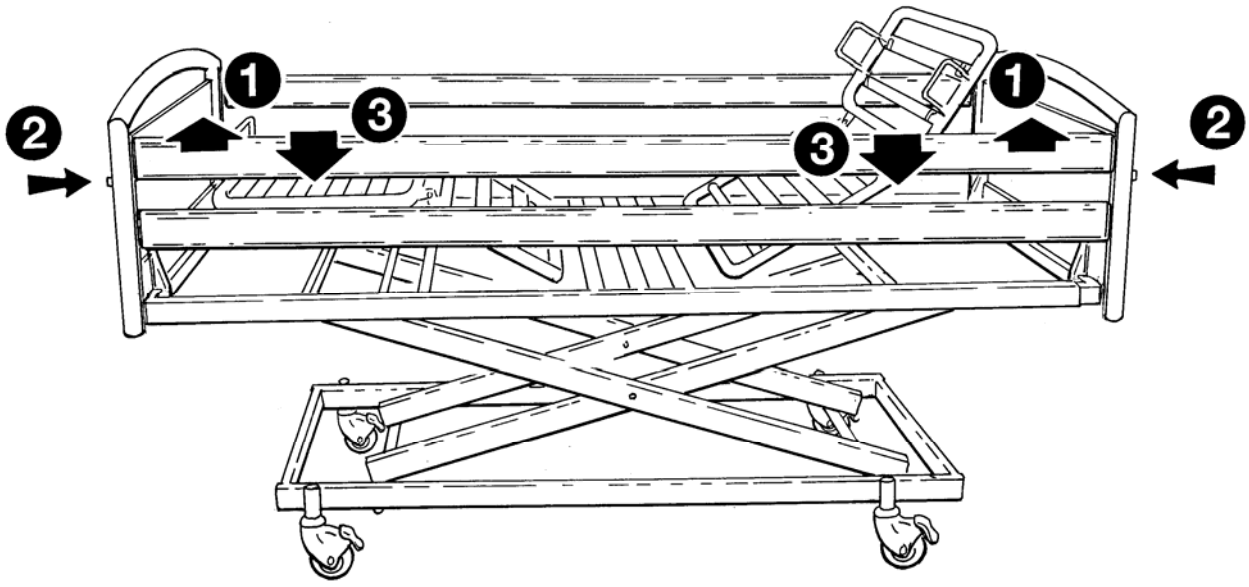




How to operate the integrated side guards

1. Slightly lift the upper long side.
2. Press the button on the outside of the board.
3. Let down the long side.

Repeat this operation at the other end of the long side.

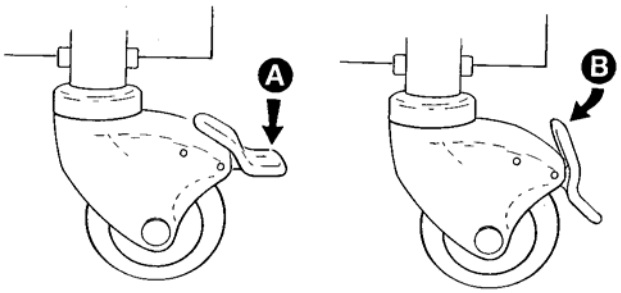


Brakes

Always apply the brakes when the bed is stationary.

How to apply the bed brake

Press down the brake pedal (A) of the castors.

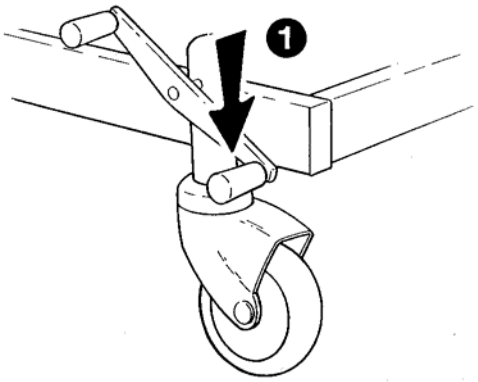


How to release the brake

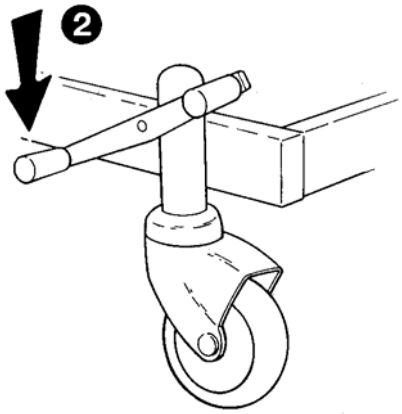
Press down the brake release (B) towards the centre of the castor.

Central locked castors

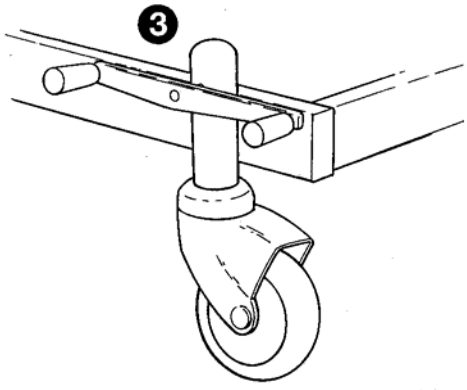
Red pedal: Brake the castor



Green pedal: Directional lock



Centre position: Free rotating castors



Maintenance schedule

Make a complete overhaul of the bed once a year at the minimum.

N.B.! Make copies of this page and use one for each bed.

Serial number of the bed:

Items to be checked:	Date/signature								
Tighten screws and nuts. Replace a dismantled nut with a new one.									
Check welding seams.									
Tighten the attachment systems for the castors.									
Check and adjust the castor brake. (Central locking).									
Check the motor for the lifting function and point of attachments.									
Check the motor for the backrest function and point of attachments.									
Check the motor for the leg support function and point of attachments.									
Make sure that all cables and power plugs are in a perfect condition.									
Fix and paint damages.									
Check the battery backup, if any, to find out if the battery-operated version works.									

Lubrication / maintenance / cleaning

Make a complete overhaul of the once a year at the minimum.

Castors/brakes

The castor mechanism comes greased with water-resistant mineral grease. Under normal circumstances there is no need to replace this grease except for on such occasions where the product is being frequently cleaned or when a central wash is being used. The brake must be regularly checked and adjusted.

Lifting system/joints bed base

All joints with a high load are equipped with self-lubricating bushings. Nevertheless, all joints should be re-greased or oiled approximately once a year or even more often if the bed is frequently washed or exposed to hard wear. On this overhaul occasion, also please check and tighten all screw joints/joints

Locking/ratchet devices

These devices should be regularly oiled with coagulating oil. How often to oil is depending on how the bed is used, how often it is being cleaned/washed and what detergents are being used.

Electric system

The electric systems are free from maintenance and must not be opened. Exchange systems are available.

Cleaning of the stove-enamelled parts

Use a washing detergent that dissolves albuminoidal substances and organic fatty substances. Proportion according to information on the package. The pH-value of a ready-mixed detergent solution should be between 6.5 and 7.5. The design allows the bed to be rinsed.

Cleaning of mattresses

Use a washing detergent as above or a mild soap solution. Do not use pure spirit or chlorine solutions, as they can dry out plastic materials. The mattress withstands a temperature of 90 °C.

Cleaning of wooden parts

Use a mild soap solution or dishwashing detergents.

Technical information

Regulations

The PROBed is CE-marked according to the Medical Device Directive 93/42/EEC.
This bed is designed for adults from 12 years and upwards.
The mattress to be used with it shall have a thickness from 10 to 15 cm.
The mattress to be used with it shall have a width between 85 and 90 cm.
Original accessories only are allowed to be mounted to the bed.
The equipment is not intended to be exposed to flames of fire.

Technical information

	Standard design	Additional lifting device
SWL (Safe Working Load)	200 kilos	235 kilos
Thereof:	165 kilos patient's weight	200 kilos
	20 kilos mattress	20 kilos mattress
	15 kilos accessories	15 kilos accessories
IP-class	IP54	
Voltage	230 V ~/50 Hz	
Maximum power consumption	Max 1 A	
Effect	220 W	
Class of insulation	Class II type B, the patient is not separated from earth and metal frame	
Intermittence	10%, 2 min. ON / 18 min. OFF	
Battery backup (Option)	To operate the bed without 230V, use a 12V battery pbq 1.3 Ah – 12V. Type: Linak Part No. BA1201.	
Sound level	40 dB, according to ISO 3746.	
Height adjustability	From 32 to-88 cm	
Outside dimensions of the assembled bed	93 x 214 cm, excl. Side guards	
Mains connection	The mains cable covers an area of 3.5 m from the outer edges of the bed	
Fuse	T 1.25 AH-250V	

Material

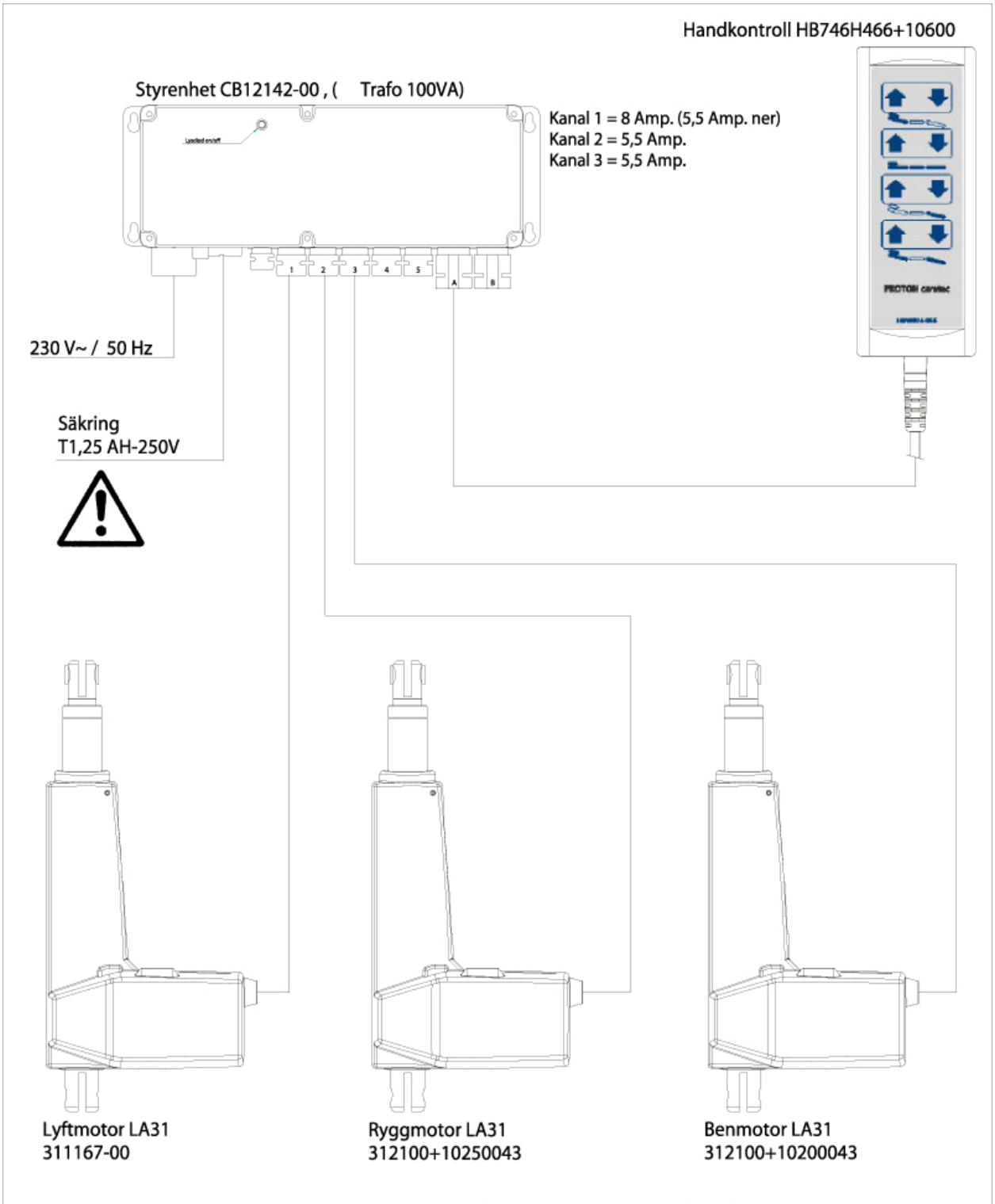
The PROBed parts are mainly made of tubular steel.
The head- and footboards are made of solid birch-wood and the long sides of decoral finished aluminium.
The plastic parts are made of injection-moulded Polypropene.
The metal parts are powder coated.

Weights and measurements

Part	Weight	Measurements
Part 1 Bed base head section	25.5 kilos	93 x 112 cm
Part 2 Bed base leg section	25.8 kilos	93 x 111 cm
Part 3 Lifting frame	50.7 kilos	79 x 160 cm
Boards	6.3 kilos	98.5 x 45 cm

Environment for use

Air pressure	700 to1060 mbar
Moisture of the atmosphere	30 to 75%
Temperature	+10^{o} to + 40° C



KUND: PROTON CARETEC AB					LINAK Scandinavia AB Box 7302 Mätslingan 2 187 14 TÄBY Tel 08-732 20 00 Fax 08-732 20 50
SPECIFIK ATION: Sammanställning och inkoppling av ställdonssystem.					RITNINGSNUMMER: PROBed
	-	-		-	ARTIKELNUMMER: PROBed
	REV. DATUM	ÄNDRING	BEGÄRD AV	RITAD AV	

RITAD AV	GODKÄND AV, DATUM	KUNDGODKÄNNANDE, DATUM	MÄTT	DATUM	BLAD
Jan Storm			mm	2004-06-17	1 / 1

Fault finding table

Valid for PROBed

Fault	Possible cause	Remedy
No action when pressing the hand control buttons.	The power supply cable is not connected. The hand control unit is out of order.	Connect or replace the cable. Replace the hand control unit.
The lifting function of the bed doesn't work.	The hand control unit is out of order. The lifting motor is out of order. The transformer is out of order. The cabling to the motor/hand control unit is out of order.	Replace the hand control unit. Connect the motor to another outlet of the transformer. If it still does not work, replace the motor. Make certain that the lamp on the transformer cover is lighted.*. If not, replace the transformer. Replace the component in question.
The backrest function doesn't work.	The hand control unit is out of order. The motor is out of order. The transformer is out of order The cabling to the motor/hand control unit is out of order.	Replace the hand control unit Connect the motor to another outlet of the transformer. If it still does not work, replace the motor. Make certain that the lamp on the transformer cover is lighted.* If not, replace the transformer. Replace the component in question.
The leg support function of the bed doesn't work.	The hand control unit is out of order. The motor is out of order. The transformer is out of order The cabling to the motor/hand control unit is out of order.	Replace the hand control unit Connect the motor to another outlet of the transformer. If it still does not work, replace the motor. Make certain that the lamp on the transformer cover is lighted.*. If not, replace the transformer. Replace the component in question.
The bed makes a squeaking noise when changing position.	Lack of grease.	Locate the join or bearing and lubricate with grease or coagulating oil. If the motor gives an abnormal sound, replace it.
The bed is not stationary in spite of applied brakes.	The brake system is worn or out of order.	Individually braked castors: Replace the castors. Central locked castors: adjust the brakes.
The bed does not manage to effect any lifting position.	The transformer is out of order	Check the patient's weight Replace the transformer.
The boards are loose.	The board attachments are broken or not tightened.	Check the fixing. If it is OK, replace the attachment.
The bed is unstable at the bed base joint.	The screws are not tightened. The two parts are not correctly assembled.	Check and tighten the screws. Make sure the parts are correctly joined.
The locking device of the neckrest doesn't work.	The ratchet is not engaged or out of order.	Make certain that the ratchet functions. If not, replace it.

continued Fault finding table

Valid for PROBed

Fault	Possible cause	Remedy
The side guard/side supports do not attach.	The yellow fastening case at the bed frame is defect.	Replace the attachment.
The side guards are unstable.	The joints are worn.	Check the screw joints of the bedrails.
The side guard does not lock at the mid- or upper position.	The latch bolt of the locking devise can be damaged or broken.	Replace the latch bolt.
The extension part does not lock. *	The locking device is not properly locked.	Check the mechanics.
The mattress support at the foot end does not lock.	The knobs are not tightened or are missing.	Tighten the knobs or replace the missing ones.

Should any other fault or deviation occur, please contact our service and spare parts division.

Spare part list

Spare part list PROBed			
Description	**Part No.**	**Number/Bed**	**Remark**
Individually braked castors	96111	4	
Mattress support foot	13863	1	
Mattress support head left	13832	1	
Mattress support head right	13833	1	
Hand control unit HB 74	94114	1	
Actuator back section	94248	1	
Actuator foot part	94249	1	
Actuator lifting device	94247	1	
Control unit	94245	1	
Adjustment buttons headrest	92410	1	
Adjustment buttons extension	92411	2	
Plastic casing accessory holder	90200	12	

Environmental product declaration

The company

Proton Caretec AB
Armaturgatan
SE-331 21 Värnamo
Phone: +46 (0)370-69 26 60
Web site: www.protoncaretec.com

Contact environment: Lennart Lindeberg
Contact products: Johan Arthursson

Business and operation

At Proton Caretec we are developing, marketing and assembling beds and accessories for care and nursing. The operation unit is located to Värnamo in the province of Småland in the south of Sweden. The hospital and nursing home beds are mainly made of steel and wood, and the home care beds are made of aluminium. Today, we have no in-house manufacture of components, but purchase them. Our largest subcontractors, for components and for surface treatment, are certified according to ISO 14001.
The products are being assembled in ergonomically optimised assembly-lines. After the assembly the products are being checked out and packed.

Environment

Proton Caretec AB is certified according to ISO 14001.
Our environment policy:*" We are committed to operating in a manner that continuously will improve our impact on the environment by efficiently using the resources. We are also committed to reducing our use of energy, sulphur emission and amount of waste by taking environmental precautions. We will seek to produce and to distribute our beds and other products and services with as little adverse impact as possible on the environment, within reasonable technical and economic justification. In addition to this the working environment shall be safe"*

Legal requirements and regulations for environment will be fulfilled. We shall pay attention to the environmental requirements from the world around us and plan our operations accordingly.

When choosing a supplier, who has a large environmental impact, we will request the supplier to take part in our environmental work.
We will inform our customers how to handle our products in order to achieve a long life-cycle and reduce the environmental impact.

The product

Nursing home bed PROBed

Weight:	108.3 kg with birch wood boards
Measurements:	214 x 98.5 cm

The product is CE-marked.
MDD EN 60 601-1
EMC EN 60 601-1-2

The product is CE approved according to EN 1970 by HMI in Copenhagen.

Integral material:

Steel	74.8 kilos
Wood	10.2 kilos
Aluminium	0.75 kilos
Plastics	2,2 kilos
Actuators	14.1 kilos
Packing (wooden)	12.0 kilos

The documentation is printed on a paper that is manufactured using non-chlorine bleaching.

Environmental product declaration

Electronics

The electric components are manufactured without using the ozone degrading solvents CFC and HCFC.

The product does not contain any asbestos, mercury, PCB, or PCT.

All plastic components are free from the heavy metals lead and cadmium.
The plastic of the circuit board meets 94-VO flame retardant. Otherwise, no plastic components weighing more than 25 g contain any PBB, PBDE, or TBBPA.
The product contains no batteries, which are classified as environmentally dangerous according to The Battery Ordinance (SFS 1997:645 [The Swedish Code of Statutes]).

The power supply unit contains a transformer, relay cards and cabling.

Distribution

The packing consists of a wooden pallet. At large deliveries or on occasions where we are doing the unpacking, the pallet is being returned for reuse. Wood is a combustible material.

The transport ex works is mainly carried out by truck. The carriers are actively working for the environment and a certification for environment control is ongoing..

Use

Service and maintenance shall be carried out by competent staff with the necessary competence to secure the safety and a long life.
The cleaning of the PROBed with the user shall be carried out by means of a moist cloth. The bed shall be cleaned by water and disinfected by spirits prior to change of user.

Length of life

The length of life for the main parts of the bed is 10 years at a minimum.

Recycling

The PROBed is designed to be easily recycled. The bed is principally made of steel. Steel is a recyclable and reusable material.
Proton Caretec is responsible for the recycling and the disassembling of the PROBed.

The packing should be recycled. The Proton Caretec is associated to the REPA-register (Register of Products Liability).
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Environmental influence

All products have an influence on the environment through their whole lives. Important environmental aspects for a care and nursing bed are the manufacture of the integral material of the product, primarily steel, plastics and wood.
The PROBed is optimised from the material strength point of view and it is designed not to have any unnecessary material.

You are a user – this is what you can do

- Make certain that the bed is being properly recycled. Contact Proton Caretec.
- Maintenance prolongs the life of the bed.

This declaration follows the directions acc. to ISO/DIS 14021 and is developed together with IVF, Industrial Research and Development Corporation

Riskanalys

Enligt EN 1441

Produkt:	***PROBed***	*Art.nr.:*	***13573***	*Deltagare:*	*Ilgvars Bruveris*
			13606	***Båge Integr.***	*Håkan Nilsson*
			13604	***Light Integr.***	

Datum: *2003-10-07*

Produktbeskrivning:

Ovan nämnd produkt är framtagen enligt EN1970
Ovan nämnd produkt är gjord för att användas inom hemvården och serviceboende.

Riskbedömning/ riskredusering:

För att beskriva, bedöma och minimera riskerna så har vi använt oss av FMEA.

Sannolikhet (1-10),allvarlighet (1-10) och upptäckt (1-4) användes för att få fram de största riskerna.
Därefter vidtogs åtgärder för att få ner riskerna till en acceptabel nivå (<70).

Kommentar:

Signatur:

Riskanalys PROBed SID 1

PROTON CARETEC AB
PROBed

FELEFEKTSANALYS
(FMEA)

2004-06-21

Pos	Funktion	Feltyp/Risk	Kravspec. Sannolikhet	Allvarlighet	Upptäckt	Prioritetstal	Rekommenderade åtgärder
1	**Design**	Vassa hörn / kanter	2	1	1	2	
1,1	Material	Åldersbeständigt	1	1	4	4	
		Slagtåligt	5	1	4	20	
		Luktar				0	
		Klimatpåverkan	5	1	4	20	
		Giftigt	6	8	1	48	
2	**Transporterbarhet**	Faller isär (1 kolli)	5	6	3	90	
2,1	Vikt	Klämrisk	7	7	3	147	
2,2	Dimensioner	Tappa (otymplig)	7	7	3	147	
2,3	Emballage	Tipprisk uppackning	7	7	3	147	2 personer vid uppackning, se manual.
2,4	Montering / demont.	Klämrisk	3	6	3	54	2 personer vid uppackning, se manual.
		Felmontering	2	2	3	12	
		Fastnar (person)	2	4	3	24	
		Handhavandefel	3	4	3	36	
3	**Funktioner**						
3,1	Nackstöd	Funktion upphör	2	1	4	8	
		Faller ihop	2	6	4	48	
		Handhavandefel	2	1	4	8	
		För stor vinkel	2	6	4	48	
		Klämrisk	1	6	4	24	
3,2	Ryggsektion	Funktion upphör	2	8	4	64	
		Faller ihop	2	8	4	64	
		Handhavandefel	1	2	4	8	
		För stor vinkel	2	6	4	48	
		Klämrisk	1	6	4	24	
3,4	Lyft	Funktion upphör	2	5	4	40	
		Faller ihop	2	8	4	64	
		Handhavandefel	1	2	4	8	
		Klämrisk	2	6	4	48	
		Alltid vågrät	1	5	4	20	

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3,5	Sittläge	Funktion upphör				0
		Faller ihop				0
		Handhavandefel				0
		För stor vinkel				0
		Klämrisk				0
		Person faller ur				0
3,6	Ur- och istgning	Fastnar	3	2	4	24
3,7	Madrasshållare	Klämrisk	1	7	7	49
		Fastnar	2	8	4	64
		Vassa kanter	2	7	4	56
		Funktion upphör	2	7	4	56
3,9	Stödhandtag	Funktion upphör	2	8	4	64
		Lossnar från säng	3	8	4	96
		Handhavandefel	3	8	4	96
		Klämrisk	1	6	4	24
		Halka	3	8	4	96
		Person faller ur	2	8	4	64
		Tipprisk	2	8	4	64
		Fastnar (person)	2	8	4	64
3,11	Sänggavlar	Lossnar från säng	3	5	4	60
		Klämrisk	1	5	4	20
		Fastnar (person)	1	5	4	20
3,12	Integrerat chassi	Funktion upphör	2	8	4	64
	Båge	Lossnar från säng	3	8	4	96
	Light	Handhavandefel	3	8	4	96
		Klämrisk	1	6	4	24
		Person faller ur	2	8	4	64
		Tipprisk	2	8	4	64
		Fastnar (person)	2	8	4	64
4	**Manövrering**					
4,1	Svängbarhet	Funktion upphör	2	3	4	24
4,2	Hjullåsning	Funktion upphör	2	6	4	48

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PROTON CARETEC AB
PROBed

FELEFEKTSANALYS
(FMEA)

2004-06-21

		Handhavandefel	2	6	4	48
4,3	Höjdinställning	Funktion upphör	2	5	4	40
		Brandrisk				0
4,4	Vinkelinställning liggyta	Funktion upphör	2	8	4	64
4,5	Ställdon (linjära)	Endast tryckande				0
4,6	Ergonomi	Tipprisk	2	8	4	64
		Halka	1	6	4	24
		Säng glider	2	6	4	48
4,7	Reglage	Handhavandefel	3	5	4	60
		Klämrisk	3	5	4	60
		Funktion upphör	2	3	4	24
5	**Komfort**					
5,1	Ljudnivå	max 40 dB (A)	3	2	4	24
5,2	Liggyta / luftcirkulation	Fastnar vid bäddning	2	3	4	24
		Skada vid bäddning	2	3	4	24
6	**Manöverdosa** (kabel)	Funktion upphör	2	5	4	40
		Handhavandefel	3	1	4	12
		Klämrisk	2	2	4	16
6,1	Utförande	Handhavandefel				0
6,2	Upphängning	Försvinner	2	2	4	16
		Funktion upphör	2	2	4	16
		Handhavandefel				0
6,3	Funktion	Funktion upphör				0
7	**El**	Klimatpåverkan	3	5	4	60
7,1	Kablage	Klämrisk	3	6	4	72
		Funktion upphör	2	5	4	40
		Fastnar (person)	2	6	4	48

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PROTON CARETEC AB
PROBed

FELEFEKTSANALYS
(FMEA)

2004-06-21

7,2	Klassning	Strömförande	2	9	4	72
7,3	Strömförsörjning	Funktion upphör	2	5	4	40
8	**Underhåll**					
8,1	Service	Klämrisk	5	8	3	120
		Fastnar (person)	3	8	3	72
		Strömförande	2	8	3	48
		Felmontering	2	8	4	64
		Handhavandefel				0
8,2	Rengöring	Handhavandefel	4	2	4	32
		Klämrisk	2	5	3	30
		Fastnar (person)	3	8	3	72
		Strömförande	2	8	3	48
		Vassa hörn / kanter	3	6	3	54
9	**Miljö**					
9,1	Livslängd	Haveri	4	9	4	144
9,5	Resthant./ återanv.	Haveri	2	2	1	4
13	**Hand.-/ servicebok**	Feltolkning	2	9	4	72

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